Burglary in the City of Pittsburgh

1. INTRODUCTION

This brief presents an analysis of burglary in the City of Pittsburgh from January 2005 through July 2015. It begins with a study of trends in the annual rate of burglary and an examination of the nature of these crimes, with special attention to methods of entry, crime location and victim demographics. This brief concludes with an examination of the Pittsburgh Bureau of Police's clearance rate statistics and the relationship between clearance rates and crime characteristics, including crime location and time of year.

Burglary Defined

The unlawful entry of a structure to commit a felony or theft. To classify an offense as a burglary, the use of force to gain entry need not have occurred. The FBI's Uniform Crime Report has three sub-classifications for burglary: forcible entry, unlawful entry where no force is used and attempted forcible entry.

— *The FBI Uniform Crime Report*

This document offers four broad conclusions about burglary in the City of Pittsburgh:

1. Burglary rates in Pittsburgh are lower than in most comparable cities.
2. Burglary is most prevalent in the Pittsburgh's East End, North Side and South Side Hilltop neighborhoods.
3. Victims of burglary are disproportionately African American and tend to be older than victims of other Part 1 crimes.
4. Burglary clearance rates are higher than those of comparable cities, but vary depending on the method of entry, location and time of year.

2. DATA

2.1. Sources

City of Pittsburgh Bureau of Police Offense Data

The analysis in this report is drawn, largely, from incident data collected by the City of Pittsburgh Bureau of Police and reported under the FBI Uniform Crime Report. These data are available for incidents that occurred from January 2005 through July 2015, and include information about the location, date, time and clearance status of each incident. These data also include victim information, including age, race and gender, for the period January 2009 through July 2015.

Federal Bureau of Investigation, Uniform Crime Report (UCR)

The Federal Bureau of Investigation collects crime data from police agencies nationwide. Because crime rates tend to vary with a city's population size,[1] this brief uses data from the UCR to compare Pittsburgh's 2014 burglary rate to similarly sized U.S. cities, referred to as the FBI cohort. Specifically, this brief compares Pittsburgh's rate of burglary to that of cities, with populations 250,000 to 499,999, which reported this crime to the UCR in 2014.

[1] Lee Ellis, Kevin M. Beaver, and John Wright, *Handbook of Crime Correlates*, 2009, San Diego, CA: Academic Press.

United States Census Bureau

The analysis in this brief incorporates population estimates from the U.S. Census Bureau's 2014 Population Estimates Program to compute the burglary rates of 13 comparable U.S. cities and the City of Pittsburgh.

PGHSNAP, City of Pittsburgh Department of City Planning

The analysis of burglary incident rates by neighborhood incorporates data from the City of Pittsburgh's Department of City Planning data tool, PGHSNAP. PGHSNAP offers population and demographic statistics derived from the 2010 U.S. Census.

Pittsburgh Today

This report uses 13 of the 14 Pittsburgh Today benchmark cities to compare Pittsburgh's burglary rate to those in comparable cities. Pittsburgh Today is a University of Pittsburgh project that has identified a list of 14 U.S. cities that are similar in size and demographics to the City of Pittsburgh, for use in comparing key indicators. The Pittsburgh Today benchmark cities include: Baltimore, Boston, Charlotte, Cleveland, Cincinnati, Denver, Detroit, Indianapolis, Kansas City, Milwaukee, Minneapolis, Philadelphia, Richmond and St. Louis. Indianapolis is omitted from this analysis, due to inconsistencies in data reported to the FBI.

2.2 Period of Study

Much of the analysis in this report is derived from incident records collected from 2005 through 2014, the most recent years for which complete and reliable City of Pittsburgh data are available. A study of clearance rates, for example, would be skewed by the inclusion of recent 2015 records, since there is a lower likelihood of case resolution. However, this report does include 2015 data in analyses of victim demographics, as the 2015 records offer victim descriptions nearly as complete as those of prior years. Victim data are only available for records collected from January 2009 through July 2015.

In comparing across U.S. cities, this report draws on data from the FBI's Uniform Crime Reporting Program, which has released national statistics through 2014. Comparisons of burglary rates or clearance rates, therefore, include comparisons to Pittsburgh's 2014 data.

2.3 Incident-level Analysis

This report uses incidents, rather than victims, as the primary unit of analysis. In the case of burglary, for example, it is possible for multiple perpetrators to commit a crime at the same time and at a single location. Records of this kind were consolidated for the purposes of this brief, with the exception of victim demographic analysis, which employs victim-level data.

2.4 The Limits of Police Data

[2] Bureau of Justice Statistics, "Criminal Victimization, 2014," http://www.bjs.gov/content/pub/pdf/cv14.pdf

In 2014, the National Crime Victimization Survey conducted by the Bureau of Justice Statistics (BJS) estimated that 40 percent of burglaries went unreported.[2] Victims of burglary might choose not to report a crime if they believe that the police will not solve their case or assist them in locating stolen items. Since the data used in this report include only those cases reported to the police or observed by an office, this analysis could be impacted by selection bias. It is important to consider the ways in which differences in reporting may skew our perception of the nature of burglary or the demographic profile of its victims.
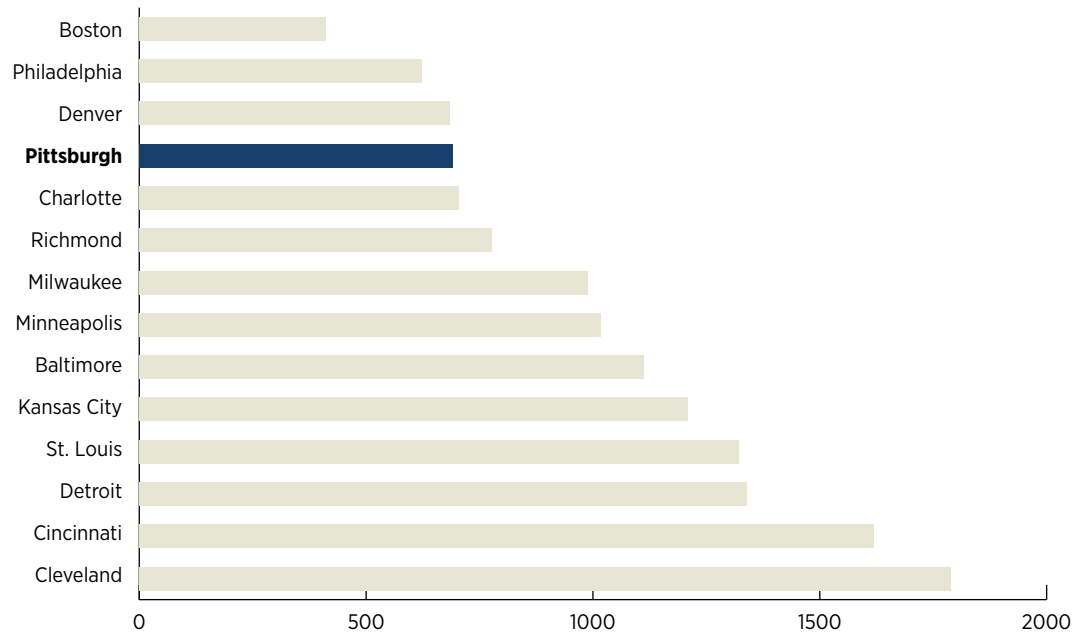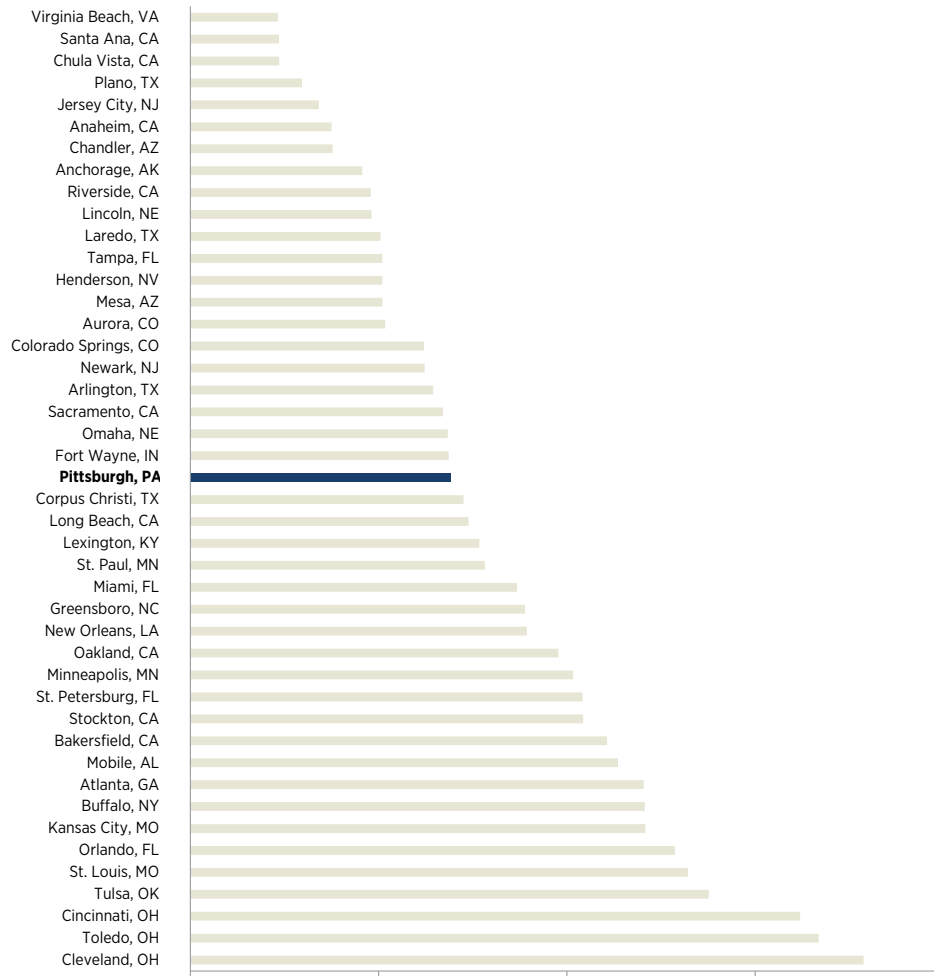
3. ANALYSIS

3.1 Trends in Burglary

In 2014, Pittsburgh Police responded to approximately 2,100 incidents of burglary, at a rate of 629 burglaries per 100,000 city residents. This annual burglary rate is lower than the rates of most Pittsburgh Today benchmark cities, including Cincinnati, Cleveland and Baltimore. **Figure 1** compares Pittsburgh to these 13 cities and suggests that Pittsburgh's burglary rate is relatively low for a mid-sized city.

FIGURE 1: **Burglary rates of comparable US cities, 2014**

Among 44 cities in the FBI cohort, Pittsburgh's 2014 burglary rate (692 per 100,000 residents) ranked nearly in the middle. As **Figure 2** shows, 22 cities had a higher burglary rate, while 21 had a lower rate. Pittsburgh's rate was also less than the average burglary rate of these cities (809 per 100,000 residents) and about half that of the four geographically-closest cohort cities (Cleveland, Toledo, Cincinnati and Buffalo).

FIGURE 2: **Burglary rates of similarly sized U.S. cities, 2014**
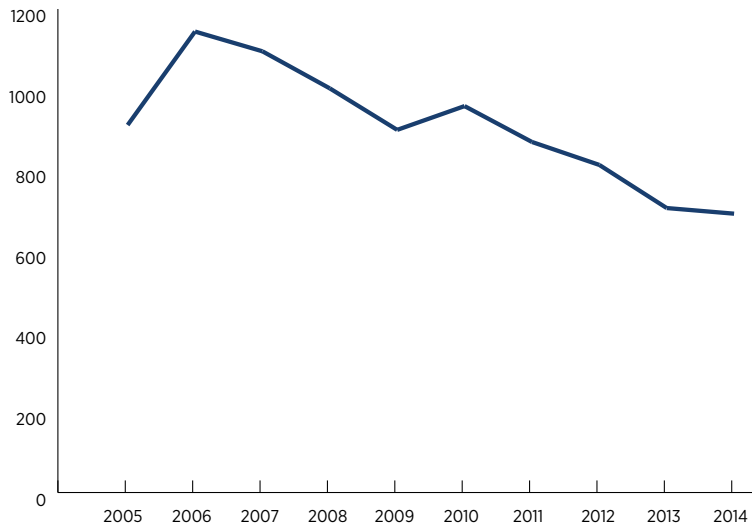

Pittsburgh's 2014 rate represents a decade low for the city. Each year since 2011, Pittsburgh has recorded progressively lower rates of burglary, with the most dramatic decline occurring between 2012 and 2013, when burglaries fell by 16 percent. Across the decade that spans 2005 through 2014, Pittsburgh's burglary rate decreased by a full 24 percent. **Table 1** details the year-over-year percent change in the burglary rate. **Figure 3** plots the burglary rate for the period 2005 through 2014, and shows gradual decline across the decade, with the greatest reductions occurring since 2007.

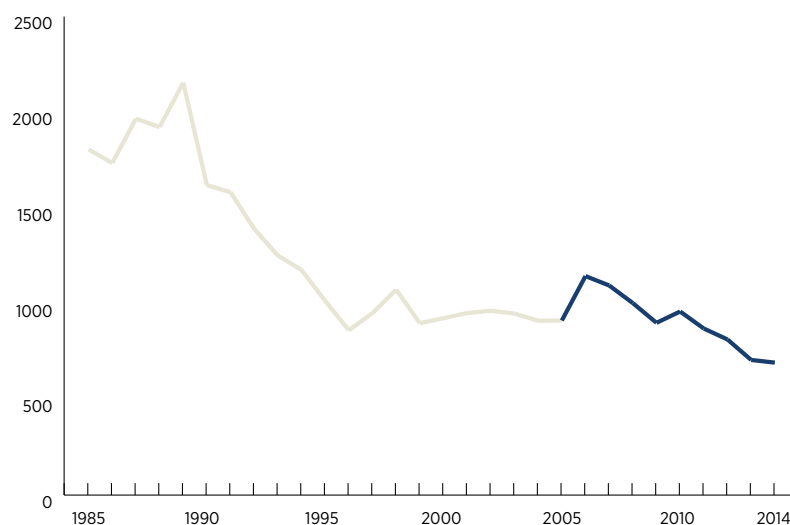TABLE 1: **Year-over-year percent change in the rate of burglary in Pittsburgh, 2005 through 2014**

	YEAR-OVER-YEAR PERCENT CHANGE
2005	-
2006	24%
2007	-10%
2008	-7%
2009	-9%
2010	5%
2011	-8%
2012	-4%
2013	-16%
2014	-2%
Ten-Year	**-24%**

FIGURE 3: **Burglary rate in Pittsburgh, 2005 through 2014**

Although 2005 is the earliest year for which we have comprehensive data, it is useful to place this recent decade in the context of the volatile late 1980s and early 1990s, a period during which cities nationwide experienced unprecedented high rates of crime. **Figure 4** plots the City of Pittsburgh's burglary rate from 1985 through 2014 using data supplied by the Pittsburgh Bureau of Police to the FBI's Uniform Crime Reporting program. The most recent decade is highlighted in blue and follows a period of elevated rates and sleep decline. Although the burglary rate has fallen steadily over the past ten years, these declines are not as dramatic as those recorded in the early 1990s.

FIGURE 4: **Burglary rate in Pittsburgh, 1985 through 2014**

Similar to the trends observed in Pittsburgh, burglary rates have declined in nearly every city in the comparison group since 2005. **Figure 5** plots the median burglary rate of Pittsburgh Today cities across this decade, while **Figure 6** presents the ten-year percent change in the burglary rate of each city. This comparison suggests that, despite a relatively low burglary rate, Pittsburgh's burglaries have fallen at roughly the same pace as burglaries in comparable cities.

Changes in the Pittsburgh burglary rate appear to mirror changes in burglary rates occurring nationwide, which suggest that some share of Pittsburgh's decline may be attributable to national forces that affect property crime. Researchers have identified several factors that have directly contributed to reductions in property crimes nationwide, including the increased use of CompStat by police departments, growth in income and a decline in the use of alcohol.[3]

[3] Oliver Roeder, Lauren-Brooke Eisen, and Julia Bowling, "What Caused the Crime Decline?" February 12, 2015, https://www.brennancenter. org/sites/default/files/ publications/What_Caused_ The_Crime_Decline.pdf

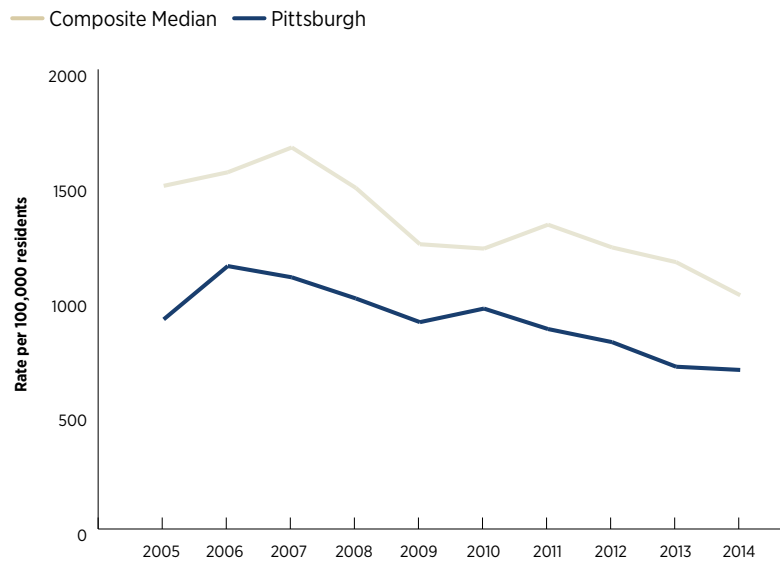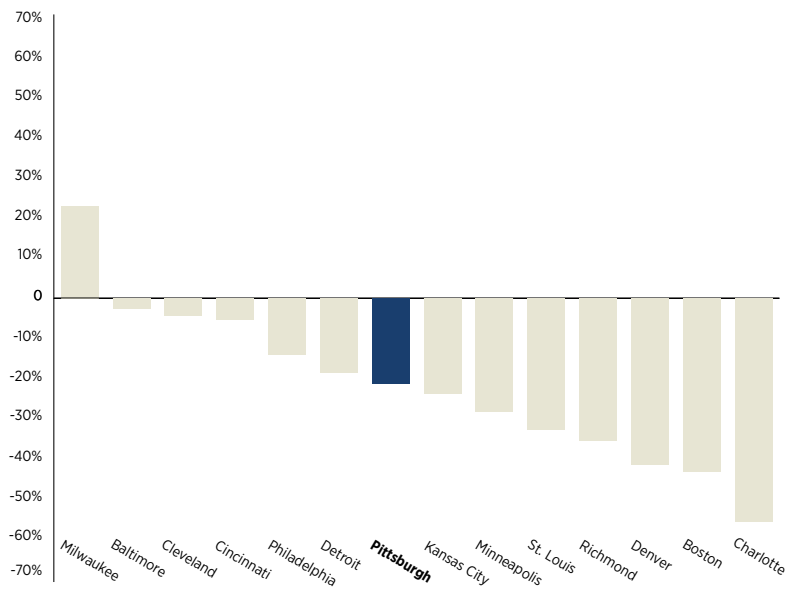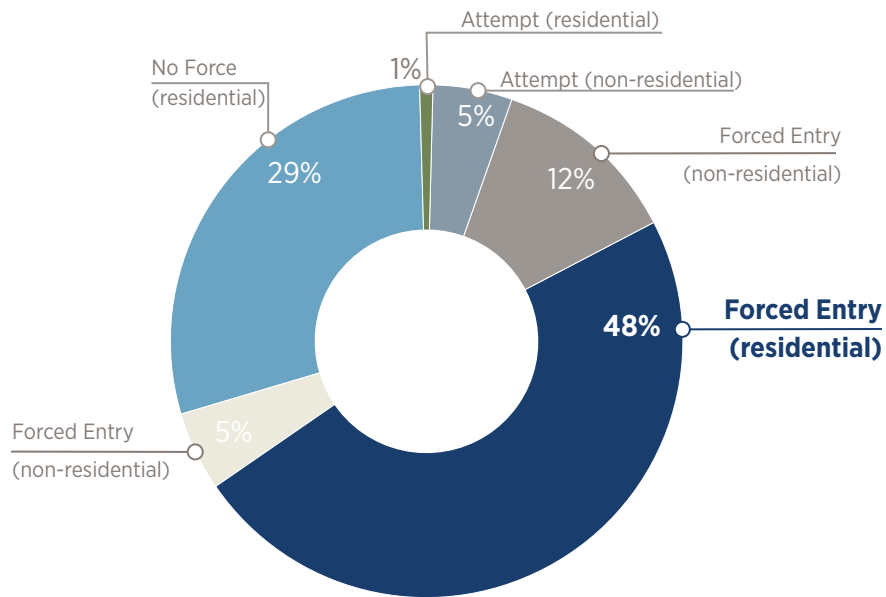**FIGURE 5: Trends in Pittsburgh's burglary rate compared to a composite of comparable cities, 2005 through 2014**

FIGURE 6: Ten-year percent change in the burglary rates of comparable U.S. cities, 2005 through 2014

3.2 The Nature of Burglary

To effectively measure and track crime throughout the city, the Pittsburgh Bureau of Police collects data on the circumstances and methods of each reported crime. Officers who respond to burglaries make note of the perpetrator's method of entry, the category of building that they entered, and whether the burglary was attempted or completed. **Figure 7** serves as a snapshot of burglaries throughout the City of Pittsburgh in 2014 by presenting the distribution of burglary methods across all known incidents. As shown in **Figure 8**, the majority of burglaries in 2014 involved forced entry (60%), while a smaller share (35%) were conducted with no force. The category, "attempt," describes a burglary in which a perpetrator has a clear and discernible intent to enter a building and commit a felony or theft. These attempts constitute just six percent of all reported burglaries.

FIGURE 7: **Percentage of burglaries, by category, 2014**

3.3 Where Burglaries Occur

The City of Pittsburgh's burglary rate, though a useful metric, can mask variations in burglary risk across Pittsburgh's 90 neighborhoods. Despite steady declines in this citywide rate, select neighborhoods and zones in the City of Pittsburgh continue to experience persistently high rates of burglary. **Figure 8** provides an illustration of these disparities by comparing the burglary rates of each City of Pittsburgh neighborhood in 2014.

This map draws attention to several residential areas of the city with particularly high rates of burglary, including Homewood, East Liberty and the North Side. When examining neighborhood-level rates, we also observe high levels of burglary in areas that typically accommodate non-residents, such as the Central Business District, South Side Flats, the Strip District and the North Shore. Generally, however, adjusting for residential population allows for comparison across neighborhoods and provides a more accurate assessment of the risk posed by burglary to members of each community.

It is important to note, however, that rates may be deceiving when the population size is small. This caution particularly applies to some of the higher-rate neighborhoods on the map.

In most cases (e.g., Chateau and South Shore), these are neighborhoods where large numbers of non-residents visit for entertainment purposes.

FIGURE 8: **Burglary rate, by neighborhood, 2014**

Rate per 100,000 Population

- 0 - 392
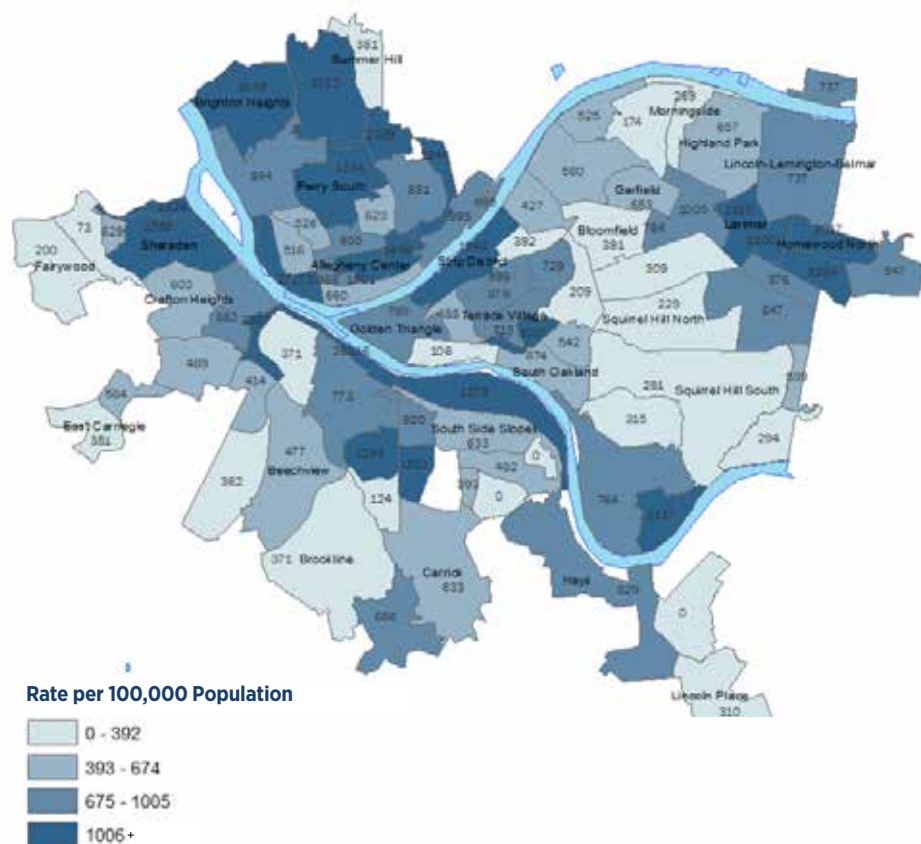- 393 - 674
- 675 - 1005
- 1006+

Table 2 lists the ten City of Pittsburgh neighborhoods with the greatest number of burglaries in 2014 and their corresponding burglary rates. In this table, as in the map, we observe high levels of burglary in neighborhoods within the East End, the North Side and the South Side Hilltop neighborhoods.

TABLE 2: **Neighborhoods with the greatest number of burglaries, 2014**

NEIGHBORHOOD	2014 BURGLARIES	BURGLARY RATE
South Side Flats	91	1,379
Sheraden	84	1,585
Homewood North	76	2,317
Brighton Heights	75	1,035
Mount Washington	68	773
Carrick	64	633
East Liberty	59	1,005
Homewood South	54	2,304
Marshall Shadeland	51	844
Brookline	49	371

Due to variations in neighborhood crime rates, there are accompanying disparities in the number of burglaries within multi-neighborhood police zones. **Table 3** lists the number of 2014 burglaries, the share of total burglaries and the burglary rate of each City of Pittsburgh police zone. In 2014, the greatest number of burglaries occurred in Zones 1, 3 and 5, which, together, contained 60 percent of these crimes. Zone 1, which covers Pittsburgh's North Side, had particularly high levels of burglary, recording 410 burglaries at a rate of 1,001 per 100,000 residents.

TABLE 3: **Burglary and burglary rates within each City of Pittsburgh Police Zone, 2014**
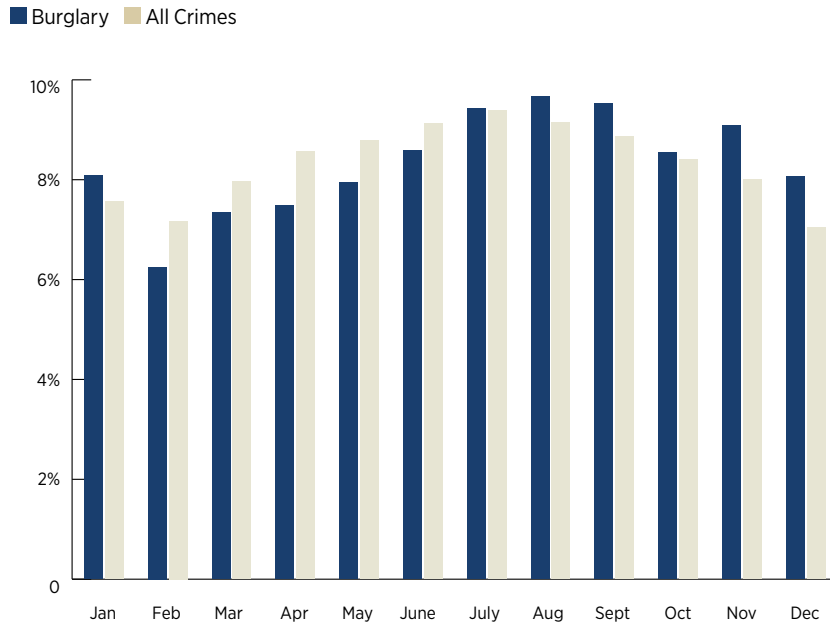
	2014 BURGLARIES	PERCENT OF TOTAL	RATE PER 100,000
Zone 1	410	20%	1001
Zone 2	179	9%	558
Zone 3	395	19%	826
Zone 4	358	17%	402
Zone 5	436	21%	866
Zone 6	278	14%	613

3.4 When Burglaries Occur

The risk to residents of burglary also varies depending on the month of the year, day of the week and time of day. **Figure 9** shows the share of burglaries that occurred in each month from 2005 through 2014, and contrasts that distribution with all crimes in the City of Pittsburgh. Over the last 10 years, police have documented high rates of burglary in the late summer and early fall.
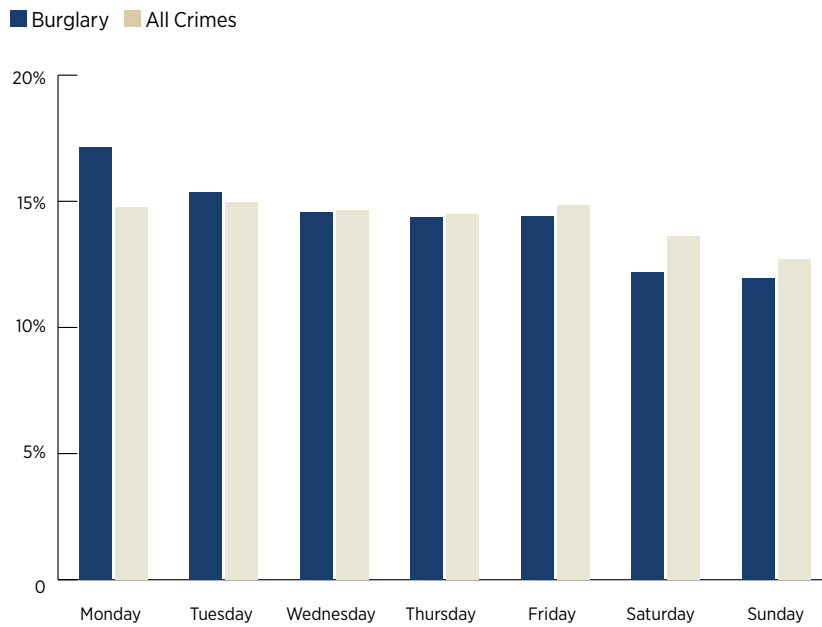
Although the monthly burglary distribution generally mirrors that of all crimes, burglaries tend to be clustered more densely in August and September and occur at relatively lower rates between February and June.

FIGURE 9: Percent of burglaries that occurred each month of the year, 2005 through 2014
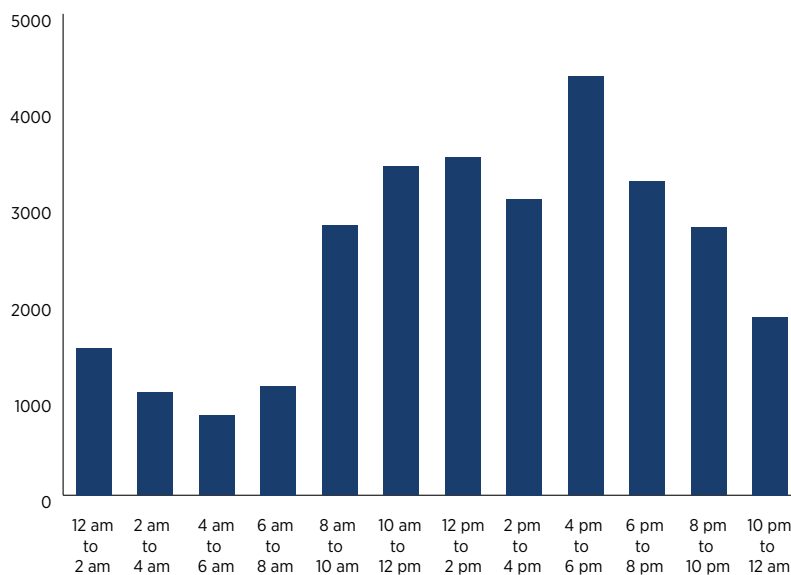
■ Burglary ■ All Crimes

Rates of burglary can also vary across a single week. **Figure 10** shows the share of burglaries that occurred on each day of the week from 2005 through 2015. This distribution is compared to the percentage of all crimes that took place each day throughout this ten-year period. While crime, in general, tends remain fairly constant throughout the week, burglary reports occur most frequently on Mondays, with much lower rates on Saturday and Sunday.

FIGURE 10: **Percent of burglaries that occurred each day of the week, 2005 through 2015**

Burglaries also fluctuate over the course of a day. **Figure 11** depicts the distribution of burglary across 12 two-hour time increments, as observed from 2005 through 2015. The data suggest that burglaries occur most frequently during the late morning and afternoon, particularly between 4:00pm and 6:00pm. Taken together, Figure 9 and Figure 10 suggest that a large share of burglaries take place during the workday, when homes are likely to be unoccupied.

FIGURE 11: **Burglary by time of day, 2005 through 2015**

3.5 The Victims of Burglary

The demographics of victims of burglary are fairly similar to those of the general population of Pittsburgh. **Figure 12** displays the percentage of male and female victims of burglary for incidents from 2009 through 2015. At 51 percent, males are represented among burglary victims in roughly the same proportion as they are represented in the population.

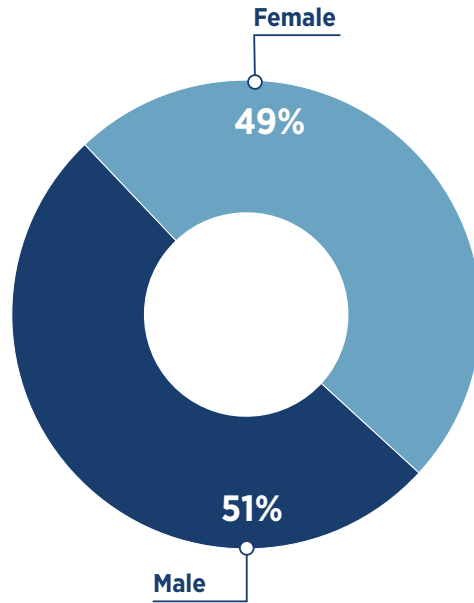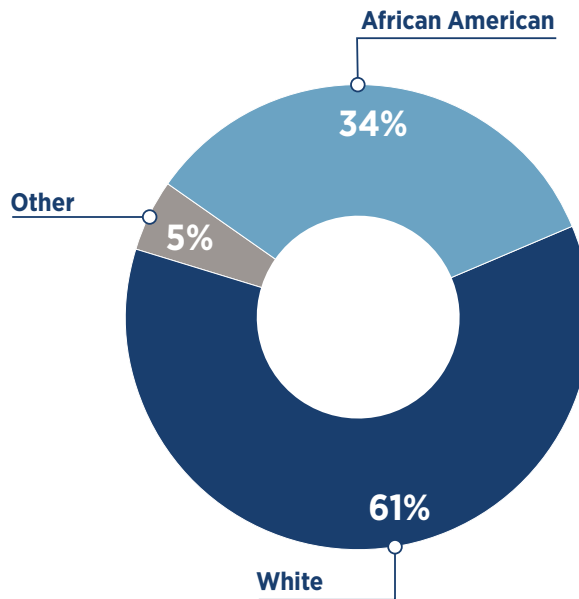FIGURE 12: **Percentage of male and female victims of burglary, 2009 through 2015**

Figure 12 shows the percentage of white victims and African American victims for burglary incidents from 2009 through 2015. While African Americans represent just 26 percent of the city's population, they are victims in 34 percent of its burglaries. In 2014, the burglary rate for African American residents was approximately 780 per 100,000 compared to 505 for white residents.

FIGURE 13: **Percentage of white and African American victims of burglary, 2009 through 2015**
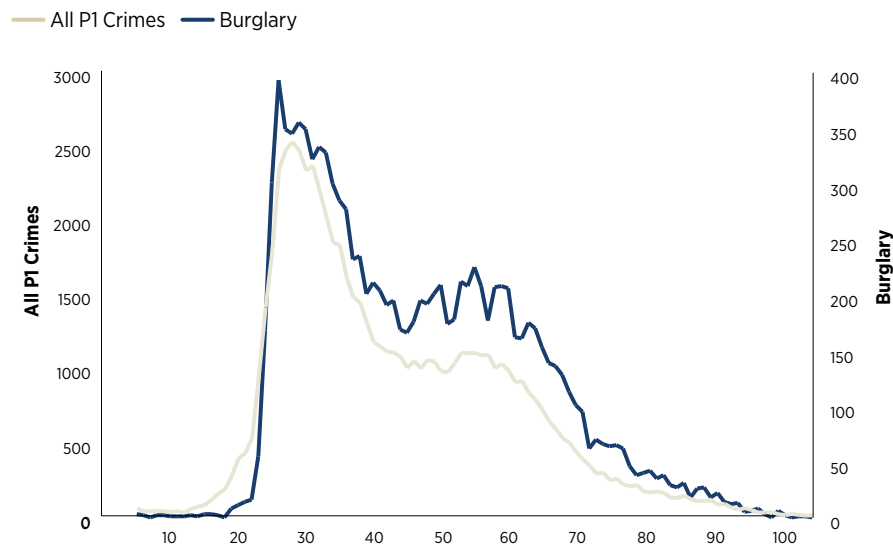

Rates of burglary victimization are also highest for young adults living in Pittsburgh. Although the median age of burglary victims is 39, rates of victimization tend to be highest among young adults in their early 20s. **Table 4** compares the median ages of each Part 1 crime for the period from 2009 through 2015. These data indicate that victims of property crimes tend to be older than victims of violent crimes. **Figure 14** plots the ages of burglary victims in comparison to the ages of victims of all Part 1 crimes.

TABLE 4: **Median age of Part 1 crime victims, 2009 through 2015**

CRIME	MEDIAN AGE OF VICTIM
Aggravated Assault	29
Homicide	28
Rape	23
Robbery	28
Part 1 Violent Crimes	28
MV Theft	39
Arson	40
Burglary	**39**
Theft	35
Part 1 Property Crimes	36
All Part 1 Crimes	**34**

FIGURE 14: Age distribution of burglary victims, 2009 through 2015

3.6 Clearance Rates for Burglary

Police departments across the country rely on clearance rates as a measure of success.
A clearance rate represents the proportion of reported crimes that are investigated and closed.
A case is classified as cleared when a perpetrator is arrested and charged or when exceptional
circumstances prevent the police and the courts from arresting or prosecuting a known perpetrator.
While rising clearance rates can signal increased success in solving crimes, they can also be
indicative of falling rates of incident reporting among hard-to-solve crimes, such as theft, or
increases in rates of crimes with nearly automatic clearances, such as drug violations, disorderly
conduct, or weapon violations.

Key Terms

Cleared by Exceptional Means: The case is closed due to exceptional circumstances
that prevent arrest and prosecution. These circumstances can include the death of
a suspect, difficulty securing victim cooperation, or challenges with extradition.
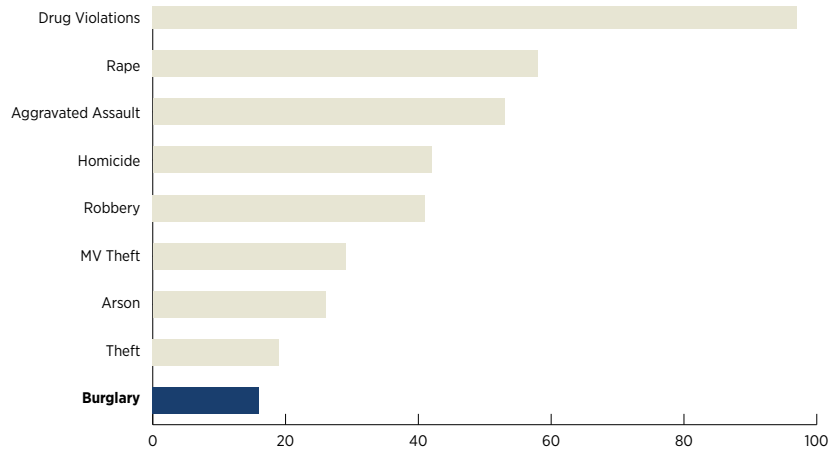
Cleared by Arrest: Police have arrested a juvenile or adult in connection with the
incident, charged them with the crime and turned the case over to a court.

Pending: The case remains open.

Clearance Rate: The number of cases cleared by arrest or by exceptional means as
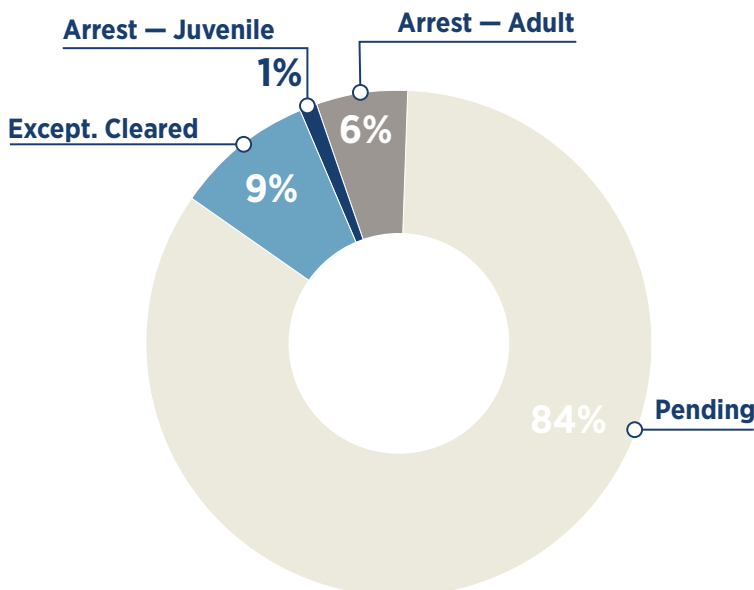a percentage of the total number of reported incidents.

Due to characteristic differences across Part 1 crimes, it is useful to calculate and track clearance rates within a single crime category. In the City of Pittsburgh, burglary tends to have the lowest clearance rate of all Part 1 crimes. **Figure 15** compares the 2014 clearance rates for these crimes.

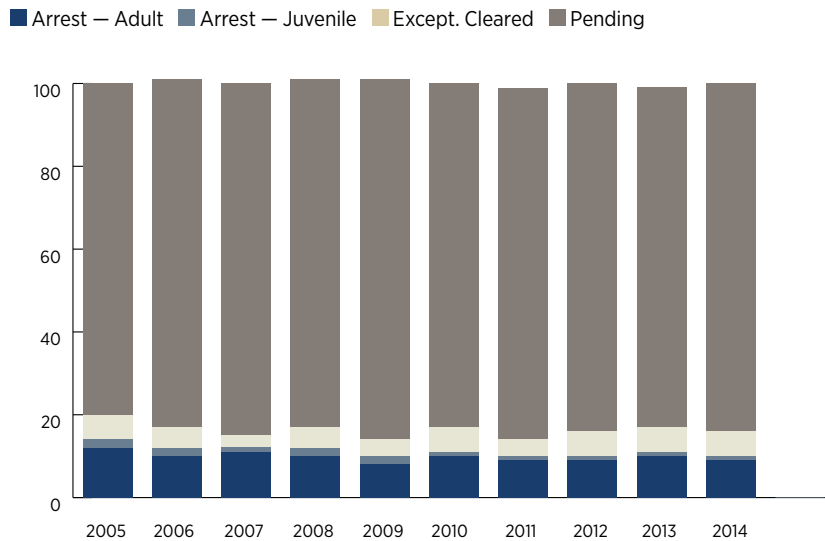**FIGURE 15: Clearance rate by crime type, 2014**

In 2014, Pittsburgh's clearance rate for burglary was 16 percent, meaning that less than one in six reported burglaries culminated in the identification of a suspect. **Figure 16** presents the distribution of all 2014 burglaries by clearance status: adult arrest, juvenile arrest, cleared by exception, or pending. Among the burglaries categorized as cleared, more than half were cleared under exceptional circumstances and an additional 38 percent were cleared through adult arrest.

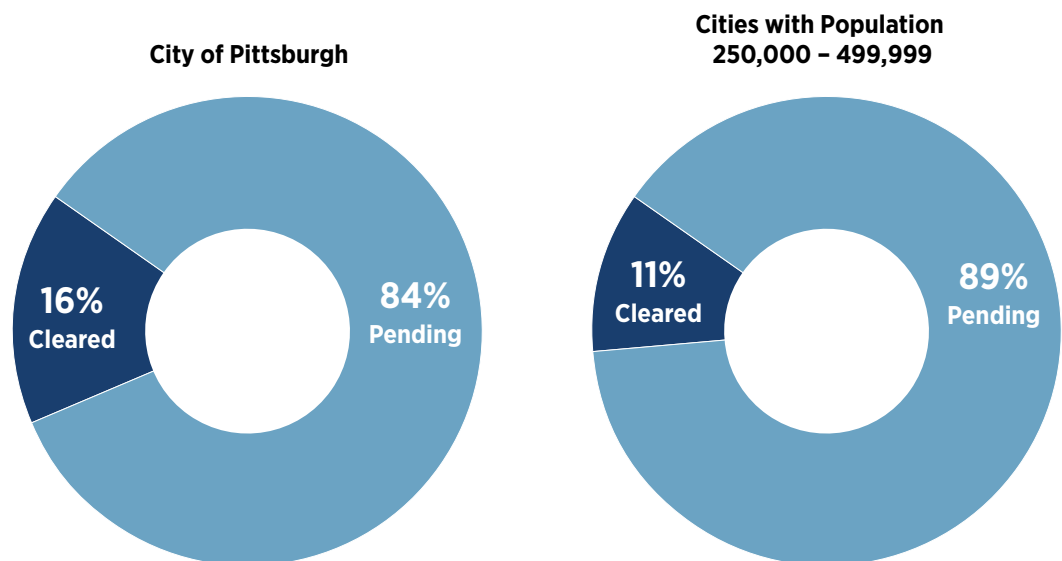**FIGURE 16: Clearance status of burglary, 2014**

As illustrated in **Figure 17**, the distribution of pending and cleared burglary cases has remained fairly constant over the past ten years. The Bureau's clearance rate has ranged from a maximum of 20 percent in 2005 to a minimum of 13 percent in 2009.

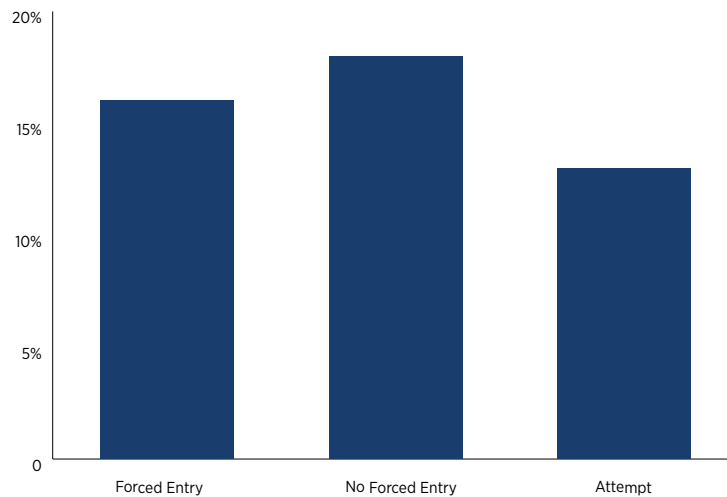**FIGURE 17: Trends in the clearance status for burglary, 2005 through 2014**

To evaluate Pittsburgh's clearance rate for burglary, it is useful to compare Pittsburgh to similar benchmark cities. Because the FBI does not report clearance rates on the city level, this brief will use the FBI's Group I: Population 250,000 to 499,999 subset category for comparison purposes. The FBI generates data for this category by combining crime statistics for all cities with populations of 250,000 to 499,999. As shown in **Figure 18**, Pittsburgh's clearance rate for burglary in 2014 was five percentage points higher than the rate of these similarly sized cities.

FIGURE 18: The burglary clearance rate in Pittsburgh compared to all cities with population 250,000 to 499,999, 2014.
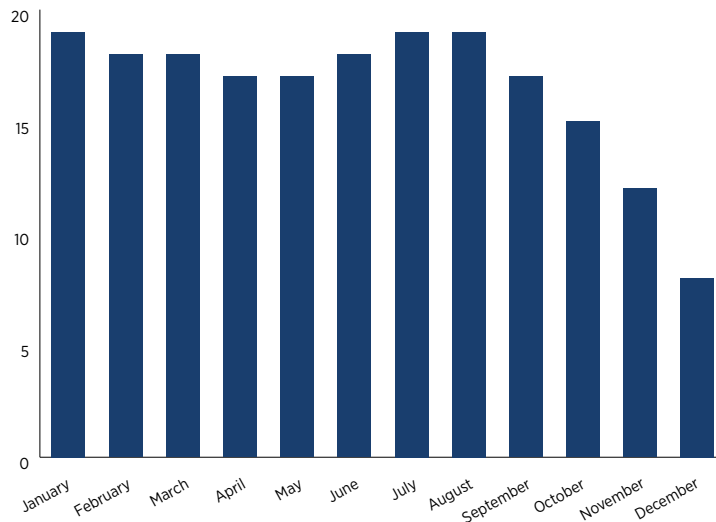
Although Pittsburgh's burglary clearance rate is higher than the average rates of comparable cities, the rate does not apply uniformly to all instances of burglary; it can vary depending on the characteristics of the crime, its location and the time of year. **Figure 19** compares the clearance rates for burglaries by their method of entry. Burglary clearance rates are lowest when a burglary is only attempted (13%). By contrast, burglaries that are accomplished with no forced entry have the highest clearance rate, at 18 percent.

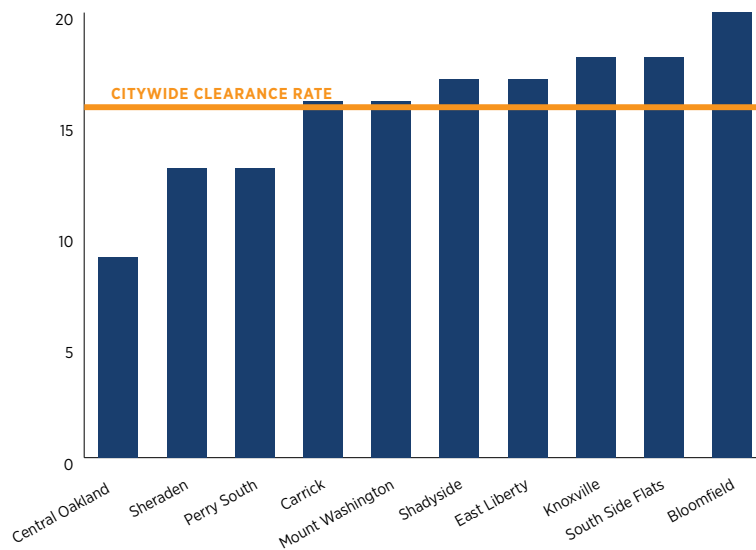FIGURE 19: **Burglary clearance rate by category of entry, 2005 through 2014**

Burglary clearance rates differ depending on the month in which the crime occurred. As shown in **Figure 20**, clearance rates are lowest for burglaries that take place near the end of the year. While 19 percent of January burglaries are cleared, only 8 percent of December burglaries result in a clearance.

FIGURE 20: **Burglary clearance rate by month, 2005 through 2014**

The clearance rate for burglaries can also vary depending on the location of the crime within the City of Pittsburgh. **Figure 21** presents the burglary clearance rates of the 10 Pittsburgh neighborhoods with the greatest number of total burglaries from 2005 through 2014. These neighborhoods serve as an example of the variation that can exist across Pittsburgh communities. While Bloomfield and the South Side Flats have higher than average clearance rates, Central Oakland has a particularly low rate with just nine percent of burglaries resulting in a clearance.

FIGURE 21: **Burglary clearance rates of neighborhoods with the greatest number of burglaries, 2005 through 2014**

There are modest differences as well in the clearance rate of burglary depending on the demographics of the victim. **Figure 22** compares the burglary clearance rates for female victims to the clearance rates for male victims from 2009 through 2014. While the differences are small, a slightly larger share of cases with female victims (17%) resulted in a clearance, compared to burglaries with male victims (15%). **Figure 22** shows the clearance rates of burglary for African American victims compared to white victims. Although there are disparities in clearance rates by race for other Part 1 crimes, burglaries are cleared at nearly the same rate for white and African American victims.

FIGURE 22: Clearance rate by the gender of the victim, all crimes, 2009 through 2015
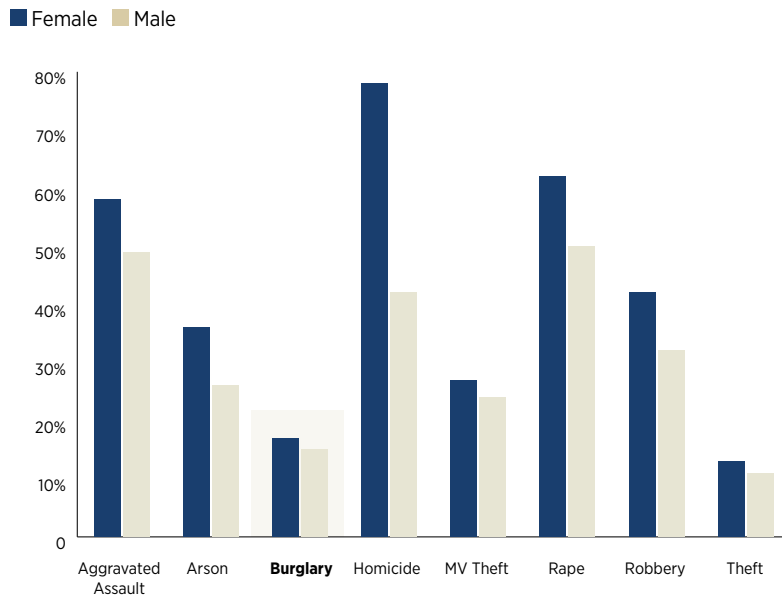
■ Female   ■ Male

FIGURE 23: Clearance rates by the race of the victim, all crimes, 2009 through 2015

■ African American   ■ White